

REMARKS

Favorable reconsideration of this application is respectfully requested.

Claims 1-57 are pending in this application. Claims 1-14, 29-55, and 57 were rejected under 35 U.S.C. §102(b) as anticipated by U.S. patent 6,462,682 to Hellberg. Claims 15-28 and 56 were rejected under 35 U.S.C. §103(a) as unpatentable over Hellberg in view of U.S. patent 6,542,094 to Venkitachalam et al. (herein “Venkitachalam”).

The above-noted prior art rejections are traversed by the present response as discussed next.

Initially, applicants note each of the independent claims is amended by the present response to clarify features recited therein. Specifically, independent claim 1 now further recites:

a low pass filter providing either low pass filtered sample signals to the up sampler, or low pass filtering signals output of the linear interpolation block [.]

The other independent claims are similarly amended as in independent claim 1.

According to that claimed feature, and with reference to Figures 5 and 14 in the present specification as non-limiting examples, a low pass filter 102 is provided to either provide a low pass filtered input to the up sampler 103, or a low pass filter 107 is provided to low pass filter an output from the linear interpolation block 105.

As discussed in the present specification for example at page 41, line 4 *et seq.*, in the claims the occurrence of folding of a sample signal of a sampling frequency input from an input terminal can be suppressed when that signal is input to the up sampler 103 by utilizing such a low pass filter as in the claimed invention.

Further, according to the claimed invention, in a FIR filter of a convolution processing unit a transmission function is associated with a transmission function of that low

pass filter, and further the filter coefficient of that FIR filter is set considering the frequency response of the low pass filter.

Thereby, in the claimed invention a low pass filter is utilized and characteristics of that low pass filter are considered in determining the characteristics of the FIR filter. Such claimed features are believed to clearly distinguish over the applied art.

More specifically, applicants first respectfully submit Hellberg does not disclose or suggest the use of the “low pass filter” as clarified in the claims.

Moreover, Hellberg discloses for example in cited Figure 18 the use of a block convolutional unit 12, but Hellberg does not disclose or suggest that characteristics of an FIR filter in that block convolutional unit 12 are based considering characteristics of a low pass filter.

Thereby, Hellberg does not provide any disclosures of any of the above-noted claimed features. In such ways, the claims as currently written are believed to clearly distinguish over Hellberg.

Moreover, no teachings in Venkitachalam are believed to cure the above-noted deficiencies in Hellberg.

In view of the present response applicants respectfully submit the claims as currently written distinguish over the applied art.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



---

Bradley D. Lytle  
Attorney of Record  
Registration No. 40,073

Surinder Sachar  
Registration No. 34,423

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/07)  
SNS/rac

I:\ATTY\SNS\27's\278094\278094US-AM.DOC